

Montgomery County Government Enterprise Architecture

Department of Technology Services
Montgomery County Government, MD



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VERSION	DATE	DESCRIPTION	AUTHOR
1.0	16 March, 2011	Initial Version	Mike Tarquinio, Montgomery County Government

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1.0 Introduction

1.1 About Montgomery County

Montgomery County is Maryland's most populous jurisdiction and one of its most affluent. The County is located adjacent to the nation's capital, Washington, D.C., and includes 497 square miles of land area. The topography is rolling with small hills. Elevations range from 52 feet above sea level near the District Line to 850 feet in the northern portion of the County near Damascus. Demographics about the county are available from the [Maryland-National Capital Park and Planning Commission's Center for Research & Information Systems Web Site](#) [10].

Montgomery County, named after General Richard Montgomery, was established by the State Convention in 1776, functioned under the County Commission system until 1948, when voters adopted a charter giving the County home rule and a council-manager form of government. In 1968, the voters approved a new charter providing for separate legislative and executive branches of government, with the legislative power vested in an elected council and executive power in an elected county executive. The new charter was fully implemented in 1970 with the November election of an executive and a council. The County Council is currently composed of nine members, four of whom are nominated and elected by voters from the entire County, and five who are elected by voters in each of the County's five Councilmanic districts. Terms for the County Executive and County Council are 4 years.

Current [budget information](#) is available at this site, including general information about the budget process and fiscal policy.

1.1.1 Municipalities

The incorporated cities, towns, villages, and municipalities enact many of their own laws. The incorporated cities are Rockville, Gaithersburg, and Takoma Park. Other incorporated municipalities are Barnesville, Brookeville, Chevy Chase, Friendship Heights, Garrett Park, Glen Echo, Kensington, Laytonsville, Poolesville, Somerset, and Washington Grove.

* Above information taken from the County Internet Web Site at the following [link](#) [9]

1.2 Enterprise Architecture Program

Starting in 2000 the Department of Technology Services initiated an Enterprise Architecture program that resulted in the official publishing of the Montgomery County Technical Architecture document in 2003. The architecture has been updated on a roughly yearly basis since that time.

1.3 Purpose

The purpose of the Enterprise Architecture Program is to communicate:

- the results of County business decisions (related to IT);
- the County IT Architecture and infrastructure;
- how the County manages its data; and
- how the County builds or acquires applications.

In general, it communicates how the organization has invested in its IT infrastructure (including hardware, software, processes and people). The County continues to make significant investments in IT and must communicate to many parties how future investments align or impact the architecture and infrastructure.

1.4 Document Format

The Montgomery County Enterprise Architecture consists of five separate sub-architectures: Business, Technical, Data, Application, and Performance. Each one of the sub-architectures is a standalone document but all five are subcomponents of the entire Enterprise Architecture.

The County has assembled information detailing its technologies and its direction. To avoid releasing potentially sensitive information the county follows a strict release process that involves review at multiple levels (See Section 10-617(g) of the Maryland Public Information Act).

The owner of all five sub-architecture documents and this rollup document is Mike Tarquinio (michael.tarquinio@montgomerycountymd.gov) the Department of Technology Service Enterprise Architect. The Department is located at the Department of Technology Services, 101 Monroe Street, 13th Floor, Rockville, Maryland 20850.

1.5 Enterprise Architecture Document Change Management

The Montgomery County Government Enterprise Architecture document is published by the DTS Enterprise Architect. The Enterprise Architect is responsible for working with DTS Content Experts and department representatives (through TOMG) to create a coherent Enterprise Architecture. The document adheres to stringent change management controls and follows a defined change management process.

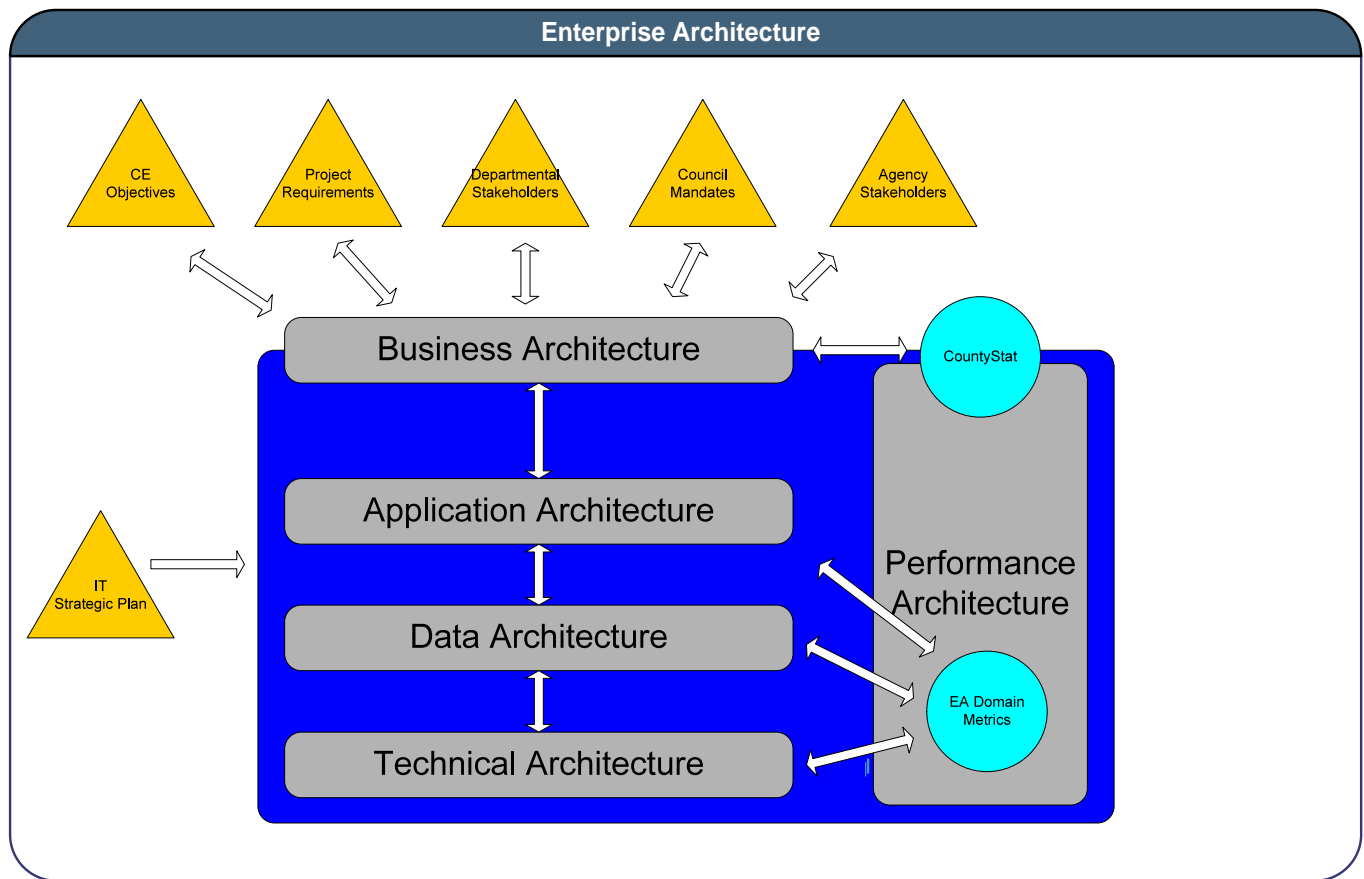
Change requests can be initiated via DTS content experts, TOMG members, or the DTS Enterprise Architect. Contact the DTS Enterprise Architect Mike Tarquinio (michael.tarquinio@montgomerycountymd.gov) for further details.

1.6 References

1. Montgomery County Office of Management and Budget – Administrative Procedure 6-1, June 14, 2004; *Use of the County-Provided Internet, Intranet, and Electronic Mail Services*;
2. Montgomery County Office of Management and Budget – Administrative Procedure 6-6, May 4, 2005; *Information Technology Policies and Procedures*;
3. Montgomery County Office of Management and Budget – Administrative Procedure 6-7, May 4, 2005; *Information Resources Security*;
4. Montgomery County Department of Technology Services, September 2004; *Computer Security Guideline*;
5. Montgomery County Department of Technology Services, September 2004; *DTS Strategic Update 2006 - 2007*;
6. Montgomery County Government, May 31, 2007; *Montgomery County Code*;
7. Montgomery County Department of Technology Services, July 19, 2007; *Enterprise Architecture Configuration Management Plan*
8. Montgomery County Department of Technology Services, April 14, 2008; *Montgomery County Government Public Safety Information Technology Architecture*
9. Montgomery County Government; *About Montgomery County*;
<http://www.montgomerycountymd.gov/mcgtmpl.asp?url=/content/mcgInfo/county/AboutCnty.asp> ;
page accessed 3/14/2011
10. Maryland-National Capital Park and Planning Commission; *MontgomeryPlanning.Org, Center for Research & Information Systems*; <http://www.montgomeryplanning.org/research/index.shtm> ; page accessed 3/14/2011

11. Montgomery County Department of Technology Services, March 16, 2011; Montgomery County Government Enterprise Architecture Business Architecture;
12. Montgomery County Department of Technology Services, March 16, 2011; Montgomery County Government Enterprise Architecture Technical Architecture;
13. Montgomery County Department of Technology Services, March 16, 2011; Montgomery County Government Enterprise Architecture Data Architecture;
14. Montgomery County Department of Technology Services, March 16, 2011; Montgomery County Government Enterprise Architecture Application Architecture;
15. Montgomery County Department of Technology Services, March 16, 2011; Montgomery County Government Enterprise Architecture Performance Architecture;
16. Montgomery County CountyStat; *CountyStat*;
<http://www.montgomerycountymd.gov/mcgtmpl.asp?url=/content/exec/stat/index.asp>; accessed 3/24/2011;

2.0 Enterprise Architecture



The County's Enterprise Architecture effort is based around maintaining an Enterprise Architecture that defines the following:

- Business Architecture - <http://www.montgomerycountymd.gov/content/dts/architecture/docs/businessarchitecture.pdf>
- Technical Architecture - <http://www.montgomerycountymd.gov/content/dts/architecture/docs/technicalarchitecture.pdf>
- Data Architecture (future release)
- Application Architecture (future release)
- Performance Architecture - <http://www.montgomerycountymd.gov/content/dts/architecture/docs/performancearchitecture.pdf>

The Enterprise Architecture presents well-defined, strategic standards adopted for the development and delivery of the County's information systems. It provides a cohesive blueprint to optimally design, purchase, develop, deploy and manage information systems for the County.

2.1 Business Architecture

The Business Architecture defines the business strategy, processes, business domains, and governance.

2.2 Technical Architecture

The Technical Architecture defines the IT infrastructure and standards.

2.3 Data Architecture

The Data Architecture defines the business physical and logical data structure and its data management policies and governance

2.4 Application Architecture

The Application Architecture defines application development standards and supported environments.

2.5 Performance Architecture

The Performance Architecture defines a program of process improvement based on metrics. At the business level the County has defined an extensive program called [CountyStat](#) [15]. The CountyStat program has developed metrics and process improvement around the business of Montgomery County Government. At the technical level the Department of Technology Services has developed an Enterprise Architecture data warehouse strategy where key domain metrics are collected and reported on. Essentially, the Enterprise Architecture has been metered and those metrics are fed into business and technical decisions.

3.0 Enterprise Architecture Slices

The Department of Technology Services Enterprise Architect creates domain specific enterprise architecture slices as project and business need arise. Each slice covers a specific domain and is meant to fulfill either a project or program need. The slice is meant to do a deeper dive into a specific domain while inheriting all the properties of the County Enterprise Architecture. The slice is maintained as the need continues and as the domain users remain engaged and supportive. Slices might not be meant for public distribution and have a limited population. Slices have been created either currently or in the past for ERP, Criminal Justice, and Public Safety.